Page 1 of 7

#4



OIPE



RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/081,076

DATE: 01/16/2003 TIME: 13:13:29

Input Set : A:\25231-20060.02.txt

Output Set: N:\CRF4\01162003\J081076.raw

```
4 <110> APPLICANT: Coutts, Stephen M.
             Barstad, Paul A.
     5
             Iverson, G. Michael
      6
             Jones, David S.
      9 <120> TITLE OF INVENTION: COMPOSITION FOR INDUCING HUMORAL ANERGY
             TO AN IMMUNOGEN COMPRISING A T CELL EPITOPE-DEFICIENT ANALOG
    10
             OF THE IMMUNOGEN CONJUGATED TO A NONIMMUNOGENIC VALENCY
    11
            PLATFORM MOLECULE
    15 <130> FILE REFERENCE: 252312006002
    17 <140> CURRENT APPLICATION NUMBER: US 10/081,076
C--> 18 <141> CURRENT FILING DATE: 2002-12-27
    20 <150> PRIOR APPLICATION NUMBER: US 09/563,167
    21 <151> PRIOR FILING DATE: 2000-05-20
    23 <150> PRIOR APPLICATION NUMBER: US 08/118,055
    24 <151> PRIOR FILING DATE: 1993-09-08
    26 <150> PRIOR APPLICATION NUMBER: US 07/652,648
     27 <151> PRIOR FILING DATE: 1991-02-08
     29 <160> NUMBER OF SEQ ID NOS: 11
     31 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     33 <210> SEQ ID NO: 1
     34 <211> LENGTH: 8
     35 <212> TYPE: PRT
     36 <213> ORGANISM: Artificial Sequence
     38 <220> FEATURE:
     39 <223> OTHER INFORMATION: Synthetic construct
     41 <400> SEQUENCE: 1
     42 Arg Ser Lys Ser Lys Cys
     43 1
     46 <210> SEQ ID NO: 2
     47 <211> LENGTH: 8
     48 <212> TYPE: PRT
     49 <213> ORGANISM: Artificial Sequence
     51 <220> FEATURE:
     52 <223> OTHER INFORMATION: Synthetic construct
     54 <400> SEQUENCE: 2
     55 Ile Lys Arg Lys Arg Gln Gln Gly
     56 1
     59 <210> SEQ ID NO: 3
     60 <211> LENGTH: 9
     61 <212> TYPE: PRT
     62 <213> ORGANISM: Artificial Sequence
     64 <220> FEATURE:
     65 <223> OTHER INFORMATION: Synthetic construct
```

DATE: 01/16/2003

```
PATENT APPLICATION: US/10/081,076
                                                              TIME: 13:13:29
                     Input Set : A:\25231-20060.02.txt
                     Output Set: N:\CRF4\01162003\J081076.raw
     67 <400> SEQUENCE: 3
     68 Trp Ile Lys Arg Lys Arg Gln Gln Gly
     72 <210> SEQ ID NO: 4
     73 <211> LENGTH: 10
     74 <212> TYPE: PRT
     75 <213> ORGANISM: Artificial Sequence
     77 <220> FEATURE:
     78 <223> OTHER INFORMATION: Synthetic construct
     80 <400> SEQUENCE: 4
     81 Ser Trp Ile Lys Arg Lys Arg Gln Gln Gly
     85 <210> SEQ ID NO: 5
     86 <211> LENGTH: 11
     87 <212> TYPE: PRT
     88 <213> ORGANISM: Artificial Sequence
     90 <220> FEATURE:
     91 <223> OTHER INFORMATION: Synthetic construct
     93 <400> SEQUENCE: 5
     94 Ile Ser Trp Ile Lys Arg Lys Arg Gln Gln Gly
     95 1
                         5
     98 <210> SEQ ID NO: 6
     99 <211> LENGTH: 12
     100 <212> TYPE: PRT
     101 <213> ORGANISM: Artificial Sequence
     103 <220> FEATURE:
     104 <223> OTHER INFORMATION: Synthetic construct
     106 <400> SEQUENCE: 6
     107 Cys Ile Ser Trp Ile Lys Arg Lys Arg Gln Gln Gly
     108 1
     111 <210> SEQ ID NO:
     112 <211> LENGTH: 14
     113 <212> TYPE: PRT
     114 <213> ORGANISM: Artificial Sequence
     116 <220> FEATURE:
     117 <223> OTHER INFORMATION: Synthetic construct
W--> 119 <221> NAME/KEY: VARIANT
     120 <222> LOCATION: 1
     121 <223> OTHER INFORMATION: Xaa = This position is H2N
W--> 123 <221> VARIANT
     124 <222> LOCATION: 14
     125 <223> OTHER INFORMATION: Xaa = This position is CO2H
W--> 127 <400> 7
W--> 128 Xaa Cys Ile Ser Trp Ile Lys Arg Lys Arg Gln Gln Gly Xaa
     129 1
     132 <210> SEQ ID NO: 8
     133 <211> LENGTH: 12
     134 <212> TYPE: PRT
     135 <213> ORGANISM: Artificial Sequence
```

RAW SEQUENCE LISTING

DATE: 01/16/2003

TIME: 13:13:29

```
Input Set : A:\25231-20060.02.txt
                     Output Set: N:\CRF4\01162003\J081076.raw
     137 <220> FEATURE:
     138 <223> OTHER INFORMATION: Synthetic construct
W--> 140 <221> NAME/KEY: VARIANT
     141 <222> LOCATION: 1
     142 <223> OTHER INFORMATION: Xaa = This position is H2N
W--> 144 <221> VARIANT
     145 <222> LOCATION: 12
     146 <223> OTHER INFORMATION: Xaa = This position is CO2H
W--> 148 <400> 8
W--> 149 Xaa Cys Trp Ile Lys Arg Lys Arg Gln Gln Gly Xaa
     150 1
     153 <210> SEQ ID NO: 9
     154 <211> LENGTH: 13
     155 <212> TYPE: PRT
     156 <213> ORGANISM: Artificial Sequence
     158 <220> FEATURE:
     159 <223> OTHER INFORMATION: Synthetic construct
W--> 161 <221> NAME/KEY: VARIANT
     162 <222> LOCATION: 1
     163 <223> OTHER INFORMATION: Xaa = This position is H2N
W--> 165 <221> VARIANT
     166 <222> LOCATION: 13
     167 <223> OTHER INFORMATION: Xaa = This position is CO2H
W--> 169 < 400 > 9
W--> 170 Xaa Trp Ile Lys Arg Lys Arg Gln Gln Lys Cys Gly Xaa
     171 1
     174 <210> SEQ ID NO: 10
     175 <211> LENGTH: 21
     176 <212> TYPE: PRT
     177 <213> ORGANISM: Artificial Sequence
     179 <220> FEATURE:
     180 <223> OTHER INFORMATION: Synthetic construct
W--> 182 <221> NAME/KEY: VARIANT
     183 <222> LOCATION: 1
     184 <223> OTHER INFORMATION: Xaa =This position is H2N
W--> 186 <221> VARIANT
     187 <222> LOCATION: 21
     188 <223> OTHER INFORMATION: Xaa= This position if CO2H
W--> 190 <400> 10
W--> 191 Xaa Trp Ile Lys Arg Lys Arg Gln Gln Trp Ile Lys Arg Lys Arg Gln
                                              10
W--> 193 Gln Lys Cys Gly Xaa
     194
     197 <210> SEQ ID NO: 11
     198 <211> LENGTH: 28
     199 <212> TYPE: PRT
     200 <213> ORGANISM: Melittin from bee venom
     202 <220> FEATURE:
     203 <221> NAME/KEY: VARIANT
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/081,076

RAW SEQUENCE LISTING

DATE: 01/16/2003

PATENT APPLICATION: US/10/081,076

TIME: 13:13:29

Input Set : A:\25231-20060.02.txt

Output Set: N:\CRF4\01162003\J081076.raw

204 <222> LOCATION: 1

205 <223> OTHER INFORMATION: Xaa = This position is H2N

207 <221> NAME/KEY: VARIANT

208 <222> LOCATION: 28

209 <223> OTHER INFORMATION: Xaa = This position is CO2H

W--> 211 <400> 11

W--> 212 Xaa Gly Ile Gly Ala Val Leu Lys Val Leu Thr Thr Gly Leu Pro Ala

213 1 5 10 15

W--> 214 Leu Ile Ser Trp Ile Lys Arg Lys Arg Gln Gln Xaa 215 20 25

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/16/2003 PATENT APPLICATION: US/10/081,076 TIME: 13:13:30

Input Set : A:\25231-20060.02.txt

Output Set: N:\CRF4\01162003\J081076.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; Xaa Pos. 1,14
Seq#:8; Xaa Pos. 1,12
Seq#:9; Xaa Pos. 1,13
Seq#:10; Xaa Pos. 1,21
Seq#:11; Xaa Pos. 1,28

VERIFICATION SUMMARY

DATE: 01/16/2003 TIME: 13:13:30

PATENT APPLICATION: US/10/081,076

Input Set : A:\25231-20060.02.txt

Output Set: N:\CRF4\01162003\J081076.raw

L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:119 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:123 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7 L:127 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7 L:128 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0 L:140 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:144 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8 L:148 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8 L:149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0 L:161 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:165 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9 L:169 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9 L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0 L:182 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:186 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:10 L:190 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:10 L:191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0 L:193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:16 L:211 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:11 L:212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0 L:214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:16